

Amendments to the Specification:

On page 1, following the title, please add the following heading and paragraph:

-- **CROSS-REFERENCE TO RELATED APPLICATIONS**

This is a divisional of U.S. Patent Application Serial Number 09/790,849, filed February 22, 2001, now pending, which claims benefit of U.S. Provisional Application Serial No. 60/208,260, filed May 31, 2000, now expired, the contents of both applications being incorporated in their entireties herein by reference.—

Please amend the paragraphs on page 3, lines 4-18, as follows:

-- Figure 1 —~~The shows the~~ complete nucleotide coding sequence of human histamine H4 receptor including untranslated regions ~~is shown~~.

Figure 2 —~~The illustrates the~~ amino acid sequence of human histamine H4 receptor ~~is shown~~.

Figure 3 —~~The demonstrates the~~ tissue distribution of the human histamine H4 receptor ~~is shown~~.

Figure 4 —~~Binding shows binding of [3H]-histamine to the human H4 receptor~~ ~~is shown~~.

Figure ~~Figures 5A-C Panels A, B and C~~ —~~The illustrate the~~ complete nucleotide coding sequence of mouse (A), guinea pig (B), and rat (C) histamine H4 receptors ~~is shown~~.

Figure ~~Figures 6A-C Panels A, B and C~~ —~~The illustrate the~~ amino acid sequence of mouse (A), guinea pig (B), and rat (C) histamine H4 receptors ~~is shown~~.

Figure ~~Figures 7 A-B~~ —~~The show the~~ alignment of the polynucleotide sequences of the human, guinea pig, mouse and rat histamine H4 receptor ~~is shown~~.

Figure 8 —The shows the alignment of the polypeptide sequences of the human, guinea pig, mouse and rat histamine H4 receptor is shown.--

Please amend the paragraph at page 39, lines 7-16, as follows:

--A histamine H4 receptor probe was generated by polymerase chain reaction using the following primer pair. 5' oligo: 5'

ACTAGAATTCACCGTGATGCCAGATACTAATAGCACA 3' [SEQ. ID. NO.:1] (SEQ ID NO:26) and 3' oligo: 5' ATGCAGGATCCAGCATTGAGACTGACAGGTAT 3' [SEQ. ID. NO.:2] (SEQ ID NO:27). The final probe sequence is shown in Figure 6. Amplification was cycled 35 times with a 50-60°C annealing temperature and human thalamus cDNA as template. The PCR fragment that was generated (400-500 bp) was ³²P-labelled ³²P-labelled using the klenow Klenow fragment of DNA polymerase I and an oligo-labeling kit (Pharmacia). The fragment was then cleaned by one passage through a S-200 column (Pharmacia).--